SAMSUNG ELECTRONICS AMERICA, INC.
American QA Lab
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RF Exposure Evaluation

Applicant: Samsung
FCC ID: A3LRMC30C1

Device: 3" Touch Remote (Hand-held)
Model: RMC30C1

Description: The device is a wireless hand-held TV remote with a touch screen. The unit operates from 2412 – 2462 MHz utilizing 802.11b/g/n technology. The maximum conducted output power is:

- 802.11b: 16.23 dBm
- 802.11g: 15.67 dBm
- 802.11n(HT20): 14.64 dBm
- 802.11n(HT40): 13.39 dBm

RF Exposure evaluation is performed per FCC RF Exposure Procedures and Equipment Authorization Policies 447498 D01.

Since the device is a hand-held device the RF Exposure evaluation is performed in accordance with the requirements of 447498 D01 Section 4)c)iii.

447498 D01 Section 4) c) iii):

> ***(1) Hand SAR is required for hand-held and hand-operated devices with output power > 1000 ·[f(GHz)]$^{-0.5}$ mW that are designed with the hand operating closer than 5 cm from the antenna during normal use.***
>
> ***(2) Extremity SAR is required for wrist, feet or ankle worn devices.***
>
> ***(3) Body SAR is required for hand-held and hand-operated or wrist, feet and ankle worn devices that operate closer than 5 cm to the body and the output power is > 300 ·[f(GHz)]$^{-0.5}$ mW.***

The unit is a hand held only device with no body worn configuration. Also, the antenna is located more than 5cm from the hand when being held for use.

The maximum conducted output power at 2.4GHz for the EUT is 16.23 dBm = 42mW

Based on the calculation for the minimum output power that would require SAR evaluation for a hand-held device operating at 2.4GHz:

For Hand SAR:

$1000 \times (2.4\ \text{GHz})^{-0.5} = 645\text{mW}$

For Body SAR:

$300 \times (2.4\ \text{GHz})^{-0.5} = 193\text{mW}$

The maximum output power for this device is below the powers listed above and therefore not applicable to SAR measurements and meets the RF Exposure requirements for a hand-held device.